

What is claimed is:

1. A method of load balancing in an upstream proxy, the method comprising:

receiving information from a plurality of downstream proxies;

5 maintaining a list of downstream proxies; and

assigning a weight to each of the downstream proxies in the list, the weight based upon information received from the downstream proxies.

2. The method of claim 1 further comprising receiving a request and using 10 the weights to assign a proxy.

3. The method of claim 1 wherein the information is indicative of the traffic load on the downstream proxy.

15 4. The method of claim 1 wherein the information is indicative of the tracking delay in the responses of the downstream proxy.

5. The method of claim 3 wherein the load is determined by querying the processes of the downstream proxy.

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6. A control node for load balancing, the control node comprising:

means for receiving information from a plurality of downstream proxies;

means for maintaining a list of all downstream proxies; and

means for assigning a weight to each of the downstream proxies in the list, the weight based upon information received from the downstream proxies.

7. The system of claim 6 further comprising:

5 means for receiving a request; and

means for using the weights to assign a proxy.

8. A system for providing load balancing, the system comprising:

a plurality of proxies; and

10 a control node coupled to the plurality of proxies, the control node receiving information from the plurality of proxies, maintaining a list of all proxies, and assigning a weight to each of the proxies in the list, the weight based upon information received from the proxies.

15 9. The system of claim 9 wherein the control node receives a request and uses the weights to assign a proxy to the request.

10. A method for assigning weights to a group of proxies, the method comprising the steps of:

20 sending a message to each of the proxies;

determining a response time for each of the messages sent to each of the proxies;

assigning a weight to each of the proxies based upon the response time of the message sent to the proxies;

receiving a message; and

assigning a proxy based upon the weight.

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11. A method for assigning weights to a group of proxies, the method comprising the steps of:

sending a message to each of the proxies requesting the proxy to send information indicative of the load of the proxy;

10 receiving information indicating the load of each of the proxies;

assigning a weight to each of the proxies based upon the response time of the message sent to the proxies;

receiving a message; and

assigning a proxy to the message based upon the weights of the proxies.

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12. The method of claim 11 wherein the message sent to the proxies is an INVITE message.

13. A system for load balancing, the system comprising:

20 a plurality of proxies;

a control node coupled to the plurality of proxies, the control node receiving messages from users on a network, the control node including a table of weights, each

of the weights associated with one of the plurality of proxies, the weights determined by information received by the control node from the proxies; and

5 a location server coupled to the control node, the location server directing the messages received by the control node to the proxies.

14. The system of claim 13 wherein the proxies implement the SIP protocol.

10 15. A system of claim 13 wherein the information received by the control node from the proxies indicates a time delay.

16. The system of claim 13 wherein the information received by the control node indicates the loading of the proxies.

15 17. The system of claim 13 wherein the database includes a plurality of records.

18. A computer program for load balancing, comprising:
20 first code for receiving information from a plurality of downstream proxies;
second code for maintaining a list of downstream proxies; and
third code for assigning a weight to each of the downstream proxies in the list,
the weight based upon information received from the downstream proxies.

19. A computer readable medium having stored therein instructions for causing a processing unit to execute the following method:

receiving information from a plurality of downstream proxies;
maintaining a list of downstream proxies; and
5 assigning a weight to each of the downstream proxies in the list, the weight based upon information received from the downstream proxies.